**SUBMISSION OF THE DRAFT GENERAL COMMENT ON CHILDREN’S RIGHTS AND THE ENVIRONMENT WITH A SPECIAL FOCUS ON CLIMATE CHANGE**

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CleanEarth4Kids.org firmly believes that access to clean air, clean water, healthy sustenance, and a secure, habitable world are basic human rights that must be protected for future generations. We are committed to advocating for these rights, regardless of an individual's ethnicity, socioeconomic status, country of origin, gender, or sexual orientation. It is our responsibility to ensure a safe and sustainable world for our children and all those who will inherit this planet. A safe, habitable world should be considered a fundamental entitlement, not a privilege, and with less than a decade left to prevent the most severe and irreversible effects of climate change, which will impact all facets of life, the preservation of our only planet is paramount.

The exploitation and utilization of natural resources, coupled with extensive chemical usage and pollution, has created an imminent and systemic danger to the rights of children worldwide. Unsustainable human activity has profoundly affected the natural environment fueling climate change, intensifying toxic pollution of water, air, and soil causing ocean acidification, and devastating biodiversity and ecosystems that are critical for all life.

The rapid deterioration of the global environment presents a significant and urgent threat to the well-being of present and future generations of children. With rapid industrialization and unethical business practices prevalent in many countries based on consumerism, the environment has taken a substantial toll and continues to degrade. If we do not act now, the future holds the possibility of extreme weather brought on by climate change, unreliable access to clean drinking water, and a higher risk of disease and illness from chemical use and poor air quality. [Environmental harm](https://www.weforum.org/agenda/2019/12/protect-pollinators-food-security-biodiversity-agriculture/) has already begun to affect and eliminate important pollinators and biodiversity, leading to a disrupted food chain and the global food supply at risk of collapse.[[1]](#footnote-1) With the current lack of accountability from companies and legislation for their environmental footprint, this is the reality our children will face.

It is imperative to our children’s health to establish environmental protection through definitive legislative action from the United Nations. Children must have a right to clean, safe environments free from toxic chemicals; Clean Earth 4 Kids has reviewed the Children’s Rights and the Environment with a **Special Focus on Climate Change document set forth by the UN Convention on the Rights of the Child** and appreciates the opportunity for general comment. We highlight the risks of chemical exposure from synthetic turf use, lead poisoning, pesticide use, and pollution, as well as reinforce the importance of the 9 planetary boundaries as recognized by the UN in our comment below. The present general comment should be read in conjunction with other relevant general comments of the Committee.

**Chemical Exposure: Toxic Chemicals**

Globally, approximately 400,000 children are diagnosed with cancer each [year](https://www.who.int/news-room/fact-sheets/detail/cancer-in-children).[[2]](#footnote-2) Studies have found that chemicals such as [phthalates](https://academic.oup.com/jnci/article-abstract/114/6/885/6531974?redirectedFrom=fulltext&login=false)[[3]](#footnote-3) (also called "forever chemicals”) were associated with a 20 percent higher rate of childhood cancers. Another [study](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9255714/)[[4]](#footnote-4) has shown that environmental pollution is contributing to the childhood cancer burden in resource-limited countries. [Meta-analysis](https://publications.aap.org/pediatrics/article-abstract/136/4/719/73869/Residential-Exposure-to-Pesticide-During-Childhood?redirectedFrom=fulltext)[[5]](#footnote-5) study found that pesticide exposure was linked to leukemia and lymphoma in children. [The World Health Organization](https://ascopost.com/issues/june-10-2016/low-dose-chemical-exposure-and-cancer/)[[6]](#footnote-6) (WHO) and the International Agency for Research on Cancer (IARC) approximate that 7 percent to 19 percent of human cancers are caused by exposure to environmental toxins and more than 30 percent of the global burden of disease in children is due to [environmental exposure](https://www.atsdr.cdc.gov/csem/pediatric-environmental-health/why_children.html).[[7]](#footnote-7) In the US leukemia has increased by 27 percent in children since 1975 and brain cancer rates have increased by 35 [percent](https://www.webmd.com/special-reports/cancer-strikes-a-small-town/20161020/childhood-cancer-rates-rising)*.*[[8]](#footnote-8) With about 43 children diagnosed with cancer every day in the US and one child [globally](https://www.acco.org/childhood-cancer-statistics/)[[9]](#footnote-9) every second, we must reduce their exposure to toxic [chemicals](https://ehp.niehs.nih.gov/doi/epdf/10.1289/ehp.02110721).[[10]](#footnote-10) We must protect the places where they run and play, the water they drink, and the air they breathe.

**Chemical Exposure: Synthetic Turf**

Synthetic turf is known to contain PFAS, lead, heavy metals, and other chemicals that are directly linked to health detriments and [environmental disruptions](https://www.bostonglobe.com/metro/2019/10/09/toxic-chemicals-found-blades-artificial-turf/1mlVxXjzCAqRahwgXtfy6K/story.html).[[11]](#footnote-11) Synthetic turf fields have crumb-rubber infill, which contains up to 300 chemicals, including 50 known or suspected [carcinogens](https://pubmed.ncbi.nlm.nih.gov/33385391/).[[12]](#footnote-12) These ground-up rubber bits are also microplastics, which pose a threat to the environment and wildlife through water pollution, bioaccumulation, and chemical leaching. For instance, the endangered coho salmon species have been shown to exhibit signs of harm from the toxins in the [crumb-rubber infill](https://www.edf.org/climate/methane-crucial-opportunity-climate-fight).[[13]](#footnote-13) In addition, synthetic turf is also made of plastic blades and plastic carpets, and the manufacturing process of plastic releases hazardous levels of [methane gas](https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200574).[[14]](#footnote-14) Methane is 80 times more harmful than carbon dioxide as it traps [more heat](https://climate.mit.edu/ask-mit/why-do-we-compare-methane-carbon-dioxide-over-100-year-timeframe-are-we-underrating)[[15]](#footnote-15) and children especially those who are living in the regions that have the lowest capacity to adapt to these risks are bearing the [greatest burden.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5289912/)[[16]](#footnote-16) To date, no synthetic turf manufacturers have been able to provide evidence that their products are completely free of lead or PFAS. According to the CDC, EPA, and the European Union Environment Agency, PFAS are linked to low birth weight, thyroid disease, kidney cancer, testicular cancer, liver cancer, diabetes, [endocrine disruption, and more](https://www.atsdr.cdc.gov/pfas/health-effects/index.html).[[17]](#footnote-17) PFAS, also known as “forever chemicals”, are extremely persistent and do not degrade in the environment or in our bodies. They can accumulate in the kidneys and liver with a [biological half-life ranging from 3 to 8 years](https://www.atsdr.cdc.gov/pfas/docs/PFAS-Short-Review-508.pdf).[[18]](#footnote-18) Studies have shown that PFAS is found in the blood of at least 95 percent of [Americans](https://pubmed.ncbi.nlm.nih.gov/33385391/).[[19]](#footnote-19) Children are more vulnerable to PFAS and their exposure leads to [decreased antibody response to certain vaccines and infections](https://publications.aap.org/aapnews/news/22138/Report-outlines-health-effects-of-PFAS-chemicals).[[20]](#footnote-20) [Synthetic turf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9367005/) [[21]](#footnote-21) fields impact human health by exposing our children and families to harmful chemicals, carcinogens, and factors such as increased injury risk, turf burns, hot rubber burns, bacteria build-up, and decreased time in [natural green spaces](https://nyc.gov/site/doh/health/health-topics/artificial-turf.page).[[22]](#footnote-22) The environment also faces serious risks, due to [illegal dumping](https://docs.google.com/document/d/1ITNXHwuCbx56JdzknWBbXc2mzIu_X9jS9KIxGX6zPFg/edit)[[23]](#footnote-23) and landfilling of used fields, microplastic pollution, heat islands, plastic manufacturing pollution, and more. The use of [synthetic turf harms our children](https://www.center4research.org/children-athletes-play-toxic-turf-playgrounds/), families, athletes, pets, wildlife, water, soil, and planet.[[24]](#footnote-24) CleanEarth4Kids.org strongly recommends that legislation be put in place to stop the use of synthetic turf fields. This will ensure that the harmful effects of synthetic turf on children’s health are mitigated and that alternatives are explored.

**Chemical Exposure: Lead Poisoning**

Lead poisoning is affecting children globally on an unprecedented and previously unnoticed level. Millions of children are suffering from it globally, with a large proportion of them residing in low-income countries. These children are unknowingly exposed to lead through various sources. UNICEF reports that approximately 800 million children worldwide, or about one-third of all children, have [elevated blood lead levels of 5 µg/dl or higher](https://www.unicef.org/press-releases/third-worlds-children-poisoned-lead-new-groundbreaking-analysis-says).[[25]](#footnote-25) Therefore, urgent action must be taken globally to address this issue. Exposure to lead has severe and long-lasting effects on children’s health and development and it has been linked to various negative outcomes such as decreased IQ, behavioral problems, developmental delays, increased risk of attention-deficit/ hyperactivity disorder (ADHD), aggressive behavior, chronic kidney diseases, and [anemia](https://www.cdc.gov/nceh/lead/prevention/health-effects.htm).[[26]](#footnote-26) Lead exposure can also harm the environment, as it can remain in the soil and water for long periods of time and [cause pollution](https://extension.psu.edu/lead-in-residential-soils-sources-testing-and-reducing-exposure#:~:text=Lead%20does%20not%20biodegrade%2C%20or%20disappear%20over%20time%2C,are%20exposed%20to%20lead%20in%20soil%20or%20dust).[[27]](#footnote-27) This can harm wildlife and plants, and pose risks to human health through contaminated food and water sources. CleanEarth4Kids strongly recommends that the United Nation should establish regulations and ban the use of lead in children products such as toys, toy jewelry, etc. as this would help to ensure that children around the world are protected from the dangers of lead exposure and that steps are taken to reduce their exposure to this toxic substance.

**Chemical Exposure: Pesticides**

Children have the right to a clean, healthy, and sustainable environment. Pesticides which can harm human health and contribute to the decline of [essential insects](https://www.centerforfoodsafety.org/issues/304/pollinator-protection/bee-decline-and-pesticide-use-248)[[28]](#footnote-28) like bees, should be banned to ensure the protection of this right. Bees are responsible for pollinating one-third of all food and increasing [crop yields by 60 percent](https://ourworldindata.org/pollinator-dependence).[[29]](#footnote-29) In addition to their agricultural importance, bees play a vital role in maintaining biodiversity and the health of natural ecosystems. Without bees, no other form of life will survive. Therefore, to protect the essential role that bees play in our ecosystem and food system, it is critical that pesticides, especially neonicotinoids, must be banned.

**Toxic Chemicals in Cosmetics and Personal Care Products**

The regulation in US restricts the use of 11 [ingredients](https://www.fda.gov/cosmetics/cosmetics-laws-regulations/prohibited-restricted-ingredients-cosmetics)[[30]](#footnote-30) in cosmetics and personal care, whereas in the EU almost 2,500 ingredients are prohibited from use in such [products](https://echa.europa.eu/cosmetics-prohibited-substances).[[31]](#footnote-31) Many of these banned ingredients are potentially harmful, like formaldehyde- a known carcinogen that is banned in EU, but allowed in the US- pose a significant threat to [human health](https://www.theguardian.com/us-news/2019/may/22/chemicals-in-cosmetics-us-restricted-eu).[[32]](#footnote-32) While some harmful substances, like asbestos, remain unregulated in the US, we strongly urge the UN to establish global regulations to ban these toxic chemicals. International organizations, such as the EPA, should expeditiously examine the extensive list of available chemicals and eliminate the toxic ones. We recommend the adoption of the REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) standard, which has been implemented by the EU, and has resulted in the successful prohibition of over 1300 chemicals, contributing to the betterment of the physical and environmental health of its populace.

CleanEarth4Kids.org also advocates for the establishment of unified standards by UN for the restricted use of rodenticides given that some countries, like United States, have lesser stringent regulations compared to other countries, such as those in the EU. By implementing global standards, countries can ensure that the use of rodenticides is adequately restricted to prevent both human health and environment. According to 2017 Annual Report of the American Association of Poison Control Center, 10,000 people are exposed to rodenticides annually out of which half are [children](https://www.ncbi.nlm.nih.gov/books/NBK554428/).[[33]](#footnote-33) Rodenticide use has global consequences because these chemicals threaten the safety of wildlife and endangered species through primary and [secondary poisonings](https://cwhl.vet.cornell.edu/disease/rodenticide-toxicity).[[34]](#footnote-34) While individuals are typically exposed to rodenticides in small doses over a period of several years, the limited health information available on chronic exposure, means that countries are not adequately equipped to address the long term impacts. Studies that have been conducted suggest that chronic exposure to rodenticide has been severe and even fatal consequences for [human health](https://www.ncbi.nlm.nih.gov/books/NBK554428/).[[35]](#footnote-35) Given the potential harm of rodenticides it is critical that UN adopt global standards to restrict their use. To safeguard children’s health and promote environmentally sustainable practices our organization strongly encourages the UN to adopt and promote natural strategies for rodent control to ensure that children grow up in environments free of toxic chemicals.

**Effects of Toxic Chemicals on Environment and Wildlife**

Raising awareness about the detrimental effects of toxic chemicals and pesticides on our environment is undoubtedly crucial. However, it is equally important to recognize and address the impact of these substances on wildlife. Wildlife plays a significant role in providing social, cultural, and medicinal benefits, as well as maintaining ecological and environmental stability. Therefore, it is essential to consider the potential harm that toxic chemicals and pesticides can cause to wildlife, which can have ripple effects on entire ecosystems. Furthermore, regular interactions with nature and wildlife are advantageous to our children, as evidenced by a study that highlights the [benefits of such contact](https://www.wildlifetrusts.org/news/new-report-nature-nurtures-children).[[36]](#footnote-36) Protecting major pollinators is crucial for stabilizing our food supply, as the growth and pollination of flora and fauna rely on the survival of these important species. However, the use of toxic chemicals and pesticides in our environment has entangled these products with our wildlife. The loss of wildlife is a major threat to our ecosystem, as each species plays a unique role in maintaining the balance of nature. As one species declines, it can have a domino effect on the surrounding ecosystem, causing further declines in biodiversity and potentially leading to a collapse of the entire ecosystem. Protecting wildlife is not only vital in its own right but also essential for ensuring the long-term sustainability of our food supply and the health of our environment. Our organization advocates for the ban on toxic chemicals and pesticides to protect wildlife and maintain a healthy ecosystem for the future.

**Pollution from Power Plants**

The removal of power plants from our planet is crucial for creating a healthier environment, particularly for children. Without a doubt, there are existing alternatives in the replacement of power plants such as solar energy, geothermal energy, wind energy, and battery storage [energy.](https://www.energy.gov/eere/renewable-energy)[[37]](#footnote-37) The UN should take action and promote the adoption of these alternatives to reduce the harmful effects of power plants on the environment.

The pollution from power plants is taking a serious toll on children’s health. In 2020, 60% of the electricity in the US alone was generated by burning fossil fuels, releasing the equivalent of almost 1,500 million metric tons of toxic air pollutants, [including carbon dioxide](https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions),[[38]](#footnote-38) carbon monoxide, sulfur dioxide, volatile organic compounds, sulfuric acid, and [mercury](https://www.nrdc.org/stories/fossil-fuels-dirty-facts).[[39]](#footnote-39) This toxic air contributes to respiratory and cardiovascular problems and is responsible for one in five deaths [globally.](https://www.sciencedirect.com/science/article/abs/pii/S0013935121000487)[[40]](#footnote-40) To ensure a healthy future, it is critical to remove power plants and transition to cleaner, healthier alternatives like solar, geothermal, wind, and battery storage [energy](https://www.energy.gov/eere/renewable-energy).[[41]](#footnote-41) We urge the UN to take a strong stance on the harmful effects of power plants and promote a transition to these cleaner alternatives.

 Fossil fuel like natural gas burned to power vehicles and industrial operations release excessive nitrogen oxide into the atmosphere contaminating our air and water by [creating smog and acid rain](https://www.epa.gov/no2-pollution).[[42]](#footnote-42) CleanEarth4Kids strongly urges the UN to promote the adoption of sustainable alternatives like renewable energy, hydrogen, biomass, and geothermal energy, and to encourage the immediate divestment from fossil fuels by global economies and institutions to ensure a safer and healthier future for our planet and all its inhabitants.

**Planetary Boundaries**

Climate change is only one of the 4 boundaries that we have neglected to the point where we have *already* passed the “safe” climate zone through our extensive use of greenhouse gases. [The 9 Planetary Boundaries](https://www.stockholmresilience.org/research/planetary-boundaries.html)[[43]](#footnote-43) include climate change, biodiversity integrity loss, altered biogeochemical cycles, land system change, freshwater use, ocean acidification, chemical pollution, ozone layer, and atmospheric aerosol loading. These 9 boundaries are defined as the threshold of a “safe operating space for humanity” on [Earth](https://pubmed.ncbi.nlm.nih.gov/30660336/).[[44]](#footnote-44) ‘The stability of these processes is essential to maintaining the Earth’s atmosphere” and life here on Earth. Transgressing these limits in the pursuit of economic growth is an exceedingly perilous endeavor that could jeopardize the health and well-being of present and future generations of children.

Our activities have not only exceeded the threshold of a "safe operating space for humanity" concerning climate change, but we have also crossed the limit in relation to the loss of biosphere integrity, land-system change, and the alteration of biogeochemical cycles (such as phosphorus and nitrogen). It is of the utmost importance that we prioritize these concerns immediately, and establish global regulations to curb the harmful activities that we have pursued at the expense of our children and the planet.

This dire news only serves to emphasize the importance of global cooperation. Our environmental problems have reached critical levels, and can no longer be solved by a single entity, organization, or country. For this reason, Clean Earth 4 Kids has drafted this [Climate Emergency and Actions to Take](https://docs.google.com/document/d/1Mckv66H-YM829gcS9yOt94n3zEUs-uCX3DJCUCdUgnM/edit)[[45]](#footnote-45) declaration and urges every stakeholder and reader to take these 4 planetary boundaries crossed seriously, sign this proposal, and take the appropriate steps to begin healing our planet again, before it is finally too late.

**Conclusion**

The impact of human-induced environmental changes on our communities cannot be ignored. Issues such as air pollution, toxic chemical and pesticide release, heavy metal runoff, and other environmental hazards are taking a toll on public health, leading to a surge of chronic and acute illnesses. It is imperative that we collaborate with government officials at all levels to address this pressing concern. Implementing legislation to regulate these issues is crucial in promoting better health outcomes and preserving a sustainable world for future generations. Only by working together can we create a healthier, safer, more secure, and more sustainable environment for all.

Climate change is having a profound and far reaching impact on our children's lives, affecting their health, education, security, and connection to nature. It is a complex and global problem that requires a collective effort from governments, corporations, and individuals. The deterioration of soil quality due to climate change is one of the many consequences we face, leading to reduced crop yields (due to reduced ability of soil to absorb water and carbon dioxide), malnutrition and forced migration. Climate change also causes droughts, floods, and soil depletion, which exacerbates the problem. To protect future generations, it is essential that we work together as a global community to address this challenge. We can learn from indigenous communities and those who live closer to the land about the importance of preserving the natural world and nurturing the soil that sustains us. The choices we take today will shape the world that our children will inherit.

**Statement of Urgency: Taking Action to Protect Our Planet and Children**

It is imperative that we take immediate action to reverse the damage we have caused to the planet, especially in terms of climate change. This is a pressing issue that cannot be postponed any longer. If we are to secure a better future for our children, it is crucial that the UN and other organizations and governments around the world take necessary steps to stop the mistreatment of the Earth. We encourage the reader to study and spread the word about our [Action Plans — CleanEarth4Kids](https://cleanearth4kids.org/actionplans) page, which provides a list of crucial bills and trackers on various topics including climate change, air pollution, wildlife preservation, and chemical toxin prevention, amongst many others. Please see our [UN Child Rights Explainer](https://drive.google.com/file/d/1BYG4h6o2J7oZtEIwaJEEkd6pYnj7qDml/view?usp=sharing) and sample [UN Declaration for climate action and children’s rights](https://docs.google.com/document/d/1L0OnjI6weCFT42Ayt2j6k-B5pTgXyRjm/edit?usp=sharing&ouid=107868890446695007674&rtpof=true&sd=true). Your actions can make a difference in securing a healthier, safer and more sustainable world for future generations.

Sincerely,

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